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United States Department of Agriculture,
BUREAU OF ENTOMOLOGY,

L. O. HOWARD, Entomologist and Chief of Bureau.

LIST OF PUBLICATIONS OF THE BUREAU OF
ENTOMOLOGY.

Compiled by MABEL COLCORD, *Librarian.*

There has been a demand from librarians, members of this Bureau, and others interested in entomology for a complete list of the publications of the Bureau and of those of the Department of Agriculture in general bearing on the subject and published by members of the Bureau or under its auspices. To supply this demand the following list has been compiled.

Applications for the priced publications mentioned in this list should be addressed to the Superintendent of Documents, Government Printing Office, Washington, D. C. All remittances should be made payable to him and not to the Department of Agriculture, and should be sent by postal money order or New York exchange. Currency may be sent at sender's risk, but postage stamps, foreign money, and uncertified checks will not be accepted.

The Farmers' Bulletins, circulars, separates, and popular summaries are sent free, on application to the Secretary of Agriculture; but applications from residents of foreign countries, to whom the price of these is 6 cents each, including postage, should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C. No charge is made for postage on documents forwarded to points in the United States, Guam, Hawaii, Philippine Islands, or Porto Rico, nor to Canada, Cuba, or Mexico. To other countries the regular rate of postage is charged, and remittances must cover such postage.

Where scientific names of species are given in brackets these do not occur in the titles of the publications, but are inserted for the convenience of those not familiar with the common names.

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ANNUAL REPORTS.

[The Division of Entomology was established in 1863 by the appointment of Townend Glover as Entomologist. The annual reports of the Entomologist are bound with those of the Secretary of Agriculture, and for some years have also been issued in independent form, known as author's editions.

Previous to the establishment of the division, articles of entomological interest appeared in the agricultural reports of the Patent Office. These articles are indexed in "The General Index of the Agricultural Reports of the Patent Office for 1837-1861, and of the Department of Agriculture for 1862-1876."^a]

Report of the Entomologist for 1863. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1863. pp. 561-579.) Price 60 cents. Postage 21 cents.

Report of the Entomologist for 1864. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1864. pp. 540-564.) Price 60 cents. Postage 19 cents.

Report of the Entomologist for 1865. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1865. pp. 33-45.) Price 60 cents. Postage 19 cents.

Report of the Entomologist for 1866. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1866. pp. 27-45.) Price 60 cents. Postage 19 cents.

Report of the Entomologist for 1867. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1867. pp. 58-76, figs. [16].) Price 60 cents. Postage 15 cents.

[Report of the Entomologist for 1868.] By Townend Glover. Title: The food and habits of beetles. (In Annual Report Commissioner of Agriculture for 1868. pp. 78-117, figs. 183.) Price 60 cents. Postage 17 cents.

Report of the Entomologist for 1869. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1869. pp. 60-64.) Price 70 cents. Postage 19 cents.

Report of the Entomologist and Curator of the Museum for 1870. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1870. pp. 65-91, figs. 60.) Price 65 cents. Postage 18 cents.

Report of the Entomologist and Curator of the Museum for 1871. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1871. pp. 69-88, figs. 23.) Price 55 cents. Postage 14 cents.

Report of the Entomologist and Curator of the Museum for 1872. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1872. pp. 112-138, figs. 26.) Price 55 cents. Postage 14 cents.

Report of the Entomologist and Curator of the Museum for 1873. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1873. pp. 152-169, figs. 10.) Price 40 cents. Postage 13 cents.

Report of the Entomologist and Curator of the Museum for 1874. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1874. pp. 122-146, figs. 20.) Price 40 cents. Postage 13 cents.

Report of the Entomologist for 1875. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1875. pp. 114-140, figs. 63.) Price 60 cents. Postage 17 cents.

^a By the Commissioner of Agriculture. Washington: Government Printing Office. 1876. (Now out of print.)

Report of the Entomologist and Curator of the Museum for 1876. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1876. pp. 174-176, figs. 59.) Price 40 cents. Postage 14 cents.

Report of the Entomologist and Curator of the Museum for 1877. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1877. pp. 89-148, pls. I-V.) Price 70 cents. Postage 18 cents.

Report of the Entomologist, Charles V. Riley, August 22, 1879. pp. 52+[1], pls. 7. 1879. (Author's edition from the Annual Report of the Commissioner of Agriculture for the year 1878. pp. 207-257, pls. I-VII.) Out of print. Report of Commissioner for 1878. Price 70 cents. Postage 19 cents.

Report of the Entomologist for 1879. By J. Henry Comstock. (In Annual Report Commissioner of Agriculture for 1879. pp. 185-348, pls. I-XVI.) Price 90 cents. Postage 20 cents.

Report of the Entomologist for 1880. By J. Henry Comstock. pp. iv+235-373+iv, pls. 24. 1881. (Author's edition from the Annual Report of the Commissioner of Agriculture for 1880.) Out of print. Report of Commissioner for 1880. Price \$1.20. Postage 27 cents.

Report on insects for the year 1881. By J. Henry Comstock. 1882. pp. 22, pls. XIV-XX. (Author's edition from the Annual Report of the Department of Agriculture for the year 1881. pp. 195-214, pls. XIV-XX.) Out of print.

Report of the Entomologist, Charles V. Riley, for the fiscal year ending June 30, 1882. pp. viii+167, pls. 20. 1882. (Author's edition from the Annual Report of the Department of Agriculture for the year 1881[-82]. pp. 61-214, pls. I-XX.) Out of print. Report of Commissioner for 1881 and 1882. Price \$1.30. Postage 29 cents.

Report of the Entomologist, Charles V. Riley, for the year 1883. pp. v+99-180+5+[2], pls. 13. 1883. (Author's edition from the Annual Report of the Department of Agriculture for 1883.) Out of print. Report of Commissioner for 1883. Price 60 cents. Postage 17 cents.

Report of the Entomologist, Charles V. Riley, for the year 1884. pp. vii+[1]+134+2+ix, pls. 10. 1885. (Author's edition from the Annual Report of the Department of Agriculture for the year 1884.) Out of print. Report of Commissioner for 1884. Price \$1. Postage 20 cents.

Report of the Entomologist, Charles V. Riley, for the year 1885. pp. vii+1+137+viii+2, 21., pls. 9, 1 map. 1886. (Author's edition from the Annual Report of the Department of Agriculture for the year 1885.) Out of print. Report of Commissioner for 1885. Price 80 cents. Postage 20 cents.

Report of the Entomologist, Charles V. Riley, for the year 1886. pp. v+459-592+ix, pls. 11. 1887. (Author's edition from the Annual Report of the Department of Agriculture for the year 1886.) Out of print. Report of Commissioner for 1886. Price \$1. Postage 23 cents.

Report of the Entomologist, Charles V. Riley, for the year 1887. pp. vi+48-179+vi, pls. 8. 1888. (Author's edition from the Annual Report of the Department of Agriculture for the year 1887.) Out of print. Report of Commissioner for 1887. Price \$1.20. Postage 23 cents.

Report of the Entomologist, Charles V. Riley, for the year 1888. pp. iv+53-144, pls. 12. 1889. (Author's edition from the Annual Report of the Department of Agriculture for the year 1888.) Out of print. Report of Commissioner for 1888. Price \$1. Postage 23 cents.

Report of the Entomologist for the year 1889. [By C. V. Riley.] pp. iv+331-361+iii, pls. 6. [1889?] (Author's edition from the Annual Report of the Department of Agriculture for the year 1889.) Out of print. Report of Secretary for 1889. Price 80 cents. Postage 18 cents.

Report of the Entomologist for 1890. By C. V. Riley. pp. 1-237-264, pls. I-VII. 1891. (From the Report of the Secretary of Agriculture for 1890.) Out of print.

Report of Secretary for 1890. Price \$1. Postage 20 cents.

Report of the Entomologist for 1891. By C. V. Riley. pp. i-iii+231-266+ii. 1892. (From the Report of the Secretary of Agriculture for 1891.) Out of print. Report of Secretary for 1891. Price \$1. Postage 22 cents.

Report of the Entomologist for 1892. By C. V. Riley. pp. i-iii+153-180+ii, pls. I-XII. 1893. (From the Report of the Secretary of Agriculture for 1892.) Out of print. Report of Secretary for 1892. Price \$1. Postage 22 cents.

Report of the Entomologist for 1893. By C. V. Riley. pp. i-iii+199-226+ii, pls. I-IV. 1894. (From the Report of the Secretary of Agriculture for 1893.) Out of print. Report of Secretary for 1893. Price 80 cents. Postage 19 cents.

Report of the Entomologist for 1894. By L. O. Howard. (In Annual Report Secretary of Agriculture in Message and Documents, 1893-1894. pp. 157-159.) Out of print.

Report of the Entomologist for 1895. By L. O. Howard. (In Annual Report Secretary of Agriculture in Message and Documents, 1895. pp. 153-157.) Out of print.

Report of the Entomologist for the fiscal year ending June 30, 1896. By L. O. Howard. pp. i-iii+89-93. 1896. (From the Report of the Secretary of Agriculture in Message and Documents, 1896.) Out of print.

Report of the Entomologist for 1897. By L. O. Howard. pp. i-ii+111-116. 1897. (From the Report of the Secretary of Agriculture [1897].) Out of print.

Report of the Entomologist for 1898. By L. O. Howard. pp. i-iii+17-25. 1898. (From the Report of the Secretary of Agriculture [1898].) Out of print.

Report of the Entomologist for 1899. By L. O. Howard. pp. i-iii+43-52. 1899. (From the Report of the Secretary of Agriculture [1899].) Out of print.

Report of the Entomologist for 1900. By L. O. Howard. pp. i-ii+27-34. 1900. (From Annual Reports, Department of Agriculture [1900].) Out of print.

Report of the Entomologist for 1901. By L. O. Howard. pp. i-ii+141-150. 1901. (From Annual Reports, Department of Agriculture [1901].) Out of print.

Report of the Acting Entomologist for 1902. By C. L. Marlatt. pp. i-iii+189-207. (From Annual Reports, Department of Agriculture [1902].) Out of print.

Report of the Entomologist for 1903. By L. O. Howard. pp. i-ii+227-243. (From Annual Reports, Department of Agriculture [1903].) Out of print.

Report of the Entomologist for 1904. By L. O. Howard. pp. i-iii+271-289. (From Annual Reports, Department of Agriculture [1904].) Out of print.

Report of the Entomologist for 1905. By L. O. Howard. pp. i-ii+273-302. (From Annual Reports, Department of Agriculture [1905].) Out of print.

Report of the Entomologist for 1906. By L. O. Howard. pp. 36. (From Annual Reports, Department of Agriculture [1906].) Issued Dec. 22, 1906. Out of print.

Report of the Entomologist for 1907. By L. O. Howard. pp. 45. (From Annual Reports, Department of Agriculture [1907].) Issued Jan. 17, 1908. Out of print.

Report of the Entomologist for 1908. By L. O. Howard. pp. 47. (From Annual Reports, Department of Agriculture [1908].) Issued Nov. 9, 1908.

BULLETINS, OLD SERIES.

No. 1. Reports of experiments, chiefly with kerosene, upon insects injuriously affecting the orange tree and the cotton plant, made under the direction of the Entomologist. pp. 62. 1883. Out of print.

Same, second edition. pp. 62. 1883. Out of print.

Same, third edition. pp. 62. 1885. Out of print.

No. 2. Reports of observations on the Rocky Mountain locust [*Melanoplus (Caloptenus) spretus* Uhl.] and chinch bug [*Blissus leucopterus* Say], together with extracts from the correspondence of the Division on miscellaneous insects. pp. 36. 1883. Out of print.

Same, second edition. pp. 36. 1883. Out of print.

No. 3. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 75, pls. 3. 1883. Out of print.

No. 4. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist, together with extracts from correspondence on miscellaneous insects. pp. 102, figs. 4. 1884. Out of print.

No. 5. Descriptions of North American Chalcididae from the collections of the U. S. Department of Agriculture and of Dr. C. V. Riley, with biological notes. [First paper.] Together with a list of the described North American species of the family. By L. O. Howard. pp. 47. 1885. Out of print.

No. 6. The imported elm leaf-beetle [*Galerucella luteola* Müll. (*Galeruca xanthomelæna* Schrank)]. Its habits and natural history, and means of counteracting its injuries. pp. 18, fig. 1, pl. 1. 1885. Out of print.

Same, second edition. pp. 21, fig. 1, pl. 1. 1891. Price 5 cents. Postage 1 cent.

No. 7. The Pediculi and Mallophaga affecting man and the lower animals. By Herbert Osborn. pp. 56, figs. 42. 1891. Price 10 cents. Postage 3 cents.

No. 8. The periodical Cicada. An account of Cicada septendecim and its tredecim race, with a chronology of all the broods known. By Charles V. Riley. pp. 46, figs. 8. 1885. Out of print.

Same, second edition. pp. 46. 1885. Out of print.

No. 9. The mulberry silk-worm; being a manual of instructions in silk culture. By Charles V. Riley. Sixth revised edition. pp. 65, figs. 29, pls. 2. 1886. (Eds. 1-5 of Bulletin 9 are the same as "Special Report No. 11, Office of the Secretary.") Out of print.

Same, seventh revised edition. pp. vii+65, figs. 29, pls. 2. 1888. Out of print.

No. 10. Our shade trees and their insect defoliators. Being a consideration of the four most injurious species which affect the trees of the capital, with means of destroying them. By Charles V. Riley. pp. 75, figs. 27. 1887. Out of print.

Same, second revised edition. pp. 75, figs. 27. 1888. Out of print.

No. 11. Reports of experiments with various insecticide substances, chiefly upon insects affecting garden crops, made under the direction of the Entomologist. pp. 34. 1886. Out of print.

No. 12. Miscellaneous notes on the work of the Division of Entomology for the season of 1885, prepared by the Entomologist. pp. 46, pl. 1. 1886. Out of print.

No. 13. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 78, figs. 4. 1887. Out of print.

No. 14. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 62, figs. 2, pl. 1. 1887. Out of print.

No. 15. The Icerya, or fluted scale, otherwise known as the cottony cushion-scale. [Reprint of some recent articles by the Entomologist, and of a report from the agricultural experiment station, University of California.] pp. 40. 1887. Out of print.

No. 16. The entomological writings of Dr. Alpheus Spring Packard. By Samuel Henshaw. pp. 49. 1887. Out of print.

No. 17. The chinch bug [*Blissus leucopterus* Say]: A general summary of its history, habits, enemies, and of the remedies and preventives to be used against it. By L. O. Howard. pp. 48, figs. 10. 1888. Price 5 cents. Postage 2 cents.

No. 18. The life and entomological work of the late Townend Glover. By Charles Richards Dodge. pp. 68, figs. 5, pl. 1. 1888. Out of print.

No. 19. An enumeration of the published synopses, catalogues, and lists of North American insects; together with other information intended to assist the student of American entomology. By E. A. Schwarz. pp. 77. 1888. Out of print.

No. 20. The root-knot disease of the peach, orange, and other plants in Florida, due to the work of *Anguillula*. By J. C. Neal. pp. 31, pls. 21. 1889. Out of print.

No. 21. Report of a trip to Australia, made under the direction of the Entomologist to investigate the natural enemies of the fluted scale [*Icerya purchasi* Mask.]. By Albert Koebele. pp. 32, figs. 16. 1890. Out of print.

Same, revised edition. pp. 32, figs. 16. 1890. Out of print.

No. 22. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 110, figs. 2. 1890. Price 10 cents. Postage 4 cents.

No. 23. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 83. 1891. Out of print.

No. 24. The bollworm of cotton [*Heliothis obsoleta* Fab. (*H. armigera* Hübn.)]. A report of progress in a supplementary investigation of this insect. By F. W. Mally. pp. 50, figs. 2. 1891. Price 5 cents. Postage 2 cents.

No. 25. Destructive locusts. A popular consideration of a few of the more injurious locusts (or "grasshoppers") of the United States, together with the best means of destroying them. By C. V. Riley. pp. 62, figs. 11, pls. 12, map 1. 1891. Price 15 cents. Postage 3 cents.

No. 26. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 95. 1892. Out of print.

No. 27. Reports on the damage by destructive locusts during the season of 1891, made under the direction of the Entomologist. pp. 64. 1892. Out of print.

No. 28. The more destructive locusts of America north of Mexico. By Lawrence Bruner. pp. 40, figs. 21. 1893. Out of print.

No. 29. Report on the boll worm of cotton [*Heliothis obsoleta* Fab. (*H. armiger* Hübn.)]. By F. W. Mally. pp. 73, pls. 2. 1893. Price 5 cents. Postage 3 cents.

No. 30. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 67. 1893. Out of print.

No. 31. Catalogue of the exhibit of economic entomology at the World's Columbian Exposition, Chicago, Ill., 1893, made under the direction of the Entomologist. pp. 121. 1893. Price 10 cents. Postage 4 cents.

No. 32. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 59. 1894. Out of print.

No. 33. Legislation against injurious insects; a compilation of the laws and regulations in the United States and British Columbia. By L. O. Howard. pp. 46. 1895. Out of print.

BULLETINS, NEW SERIES.

No. 1. The honey bee: A manual of instruction in apiculture. By Frank Benton. pp. 118, figs. 76, pls. 11. 1896. Out of print.

Same, revised edition. pp. 118, figs. 76, pls. 12. 1896. Out of print.

Same, third edition. pp. 118, figs. 76, pls. 12. 1899. Price 15 cents. Postage 5 cents.

Same, 54th Cong., 1st sess., H. Doc. 359, serial No. 3435.

No. 2. Proceedings of the seventh annual meeting of the Association of Economic Entomologists. pp. 100, fig. 1. 1895. Out of print.

No. 3. The San Jose scale [*Aspidiotus perniciosus* Comst.]: Its occurrences in the United States, with a full account of its life history and the remedies to be used against it. By L. O. Howard and C. L. Marlatt. pp. 80, figs. 8. 1896. Price 10 cents. Postage 3 cents.

No. 4. The principal household insects of the United States. By L. O. Howard and C. L. Marlatt. With a chapter on insects affecting dry vegetable foods. By F. H. Chittenden. pp. 130, figs. 64. 1896. Out of print.

Same, revised edition. pp. 131, figs. 64. 1902 [1889]. Price 10 cents. Postage 5 cents.

No. 5. Insects affecting domestic animals: An account of the species of importance in North America, with mention of related forms occurring on other animals. By Herbert Osborn. pp. 302, figs. 170, pls. 5. 1896. Price 20 cents. Postage 10 cents.

No. 6. Proceedings of the eighth annual meeting of the Association of Economic Entomologists. pp. 100, figs. 5. 1896. Out of print.

No. 7. Some miscellaneous results of the work of the Division of Entomology. Prepared under the direction of L. O. Howard, Entomologist. pp. 87, figs. 44. 1897. Price 10 cents. Postage 3 cents.

No. 8. Some little-known insects affecting stored vegetable products: A collection of articles detailing certain original observations made upon insects of this class. By F. H. Chittenden. pp. 45, figs. 10. 1897. Out of print.

No. 9. Proceedings of the ninth annual meeting of the Association of Economic Entomologists. pp. 87, figs. 2. 1897. Price 10 cents. Postage 4 cents.

No. 10. Some miscellaneous results of the work of the Division of Entomology. Prepared under the direction of L. O. Howard, Entomologist. pp. 99, figs. 19. 1898. Price 10 cents. Postage 4 cents.

No. 11. The gipsy moth in America: A summary account of the introduction and spread of *Porteretria dispar* in Massachusetts and of the efforts made by the State to repress and exterminate it. By L. O. Howard. pp. 39, figs. 8. 1897. Price 5 cents. Postage 2 cents.

No. 12. The San Jose scale [*Aspidiotus perniciosus* Comst.] in 1896-1897. By L. O. Howard. pp. 31, fig. 1. 1898. Price 5 cents. Postage 2 cents.

No. 13. Recent laws against injurious insects in North America, together with the laws relating to foul brood. Compiled by L. O. Howard. pp. 68. 1898. Price 5 cents. Postage 3 cents.

No. 14. The periodical Cicada: An account of *Cicada septendecim*, its natural enemies, and the means of preventing its injury, together with a summary of the distribution of the different broods. By C. L. Marlatt. pp. 148, figs. 57, pls. 3. 1898. Price 15 cents. Postage 6 cents.

No. 15. The chinch bug [*Blissus leucopterus* Say]: Its probable origin and diffusion, its habits and development, natural checks and remedial and preventive measures, with mention of the habits of an allied European species. By F. M. Webster. pp. 82, figs. 19. 1898. Out of print.

No. 16. The Hessian fly [*Mayetiola (Cecidomyia) destructor* Say] in the United States. By Herbert Osborn. pp. 57, figs. 8, pls. 2, map 1. 1898. Price 10 cents. Postage 3 cents.

No. 17. Proceedings of the tenth annual meeting of the Association of Economic Entomologists. pp. 104, figs. 4. 1898. Price 10 cents. Postage 4 cents.

No. 18. Some miscellaneous results of the work of the Division of Entomology. III. Prepared under the direction of L. O. Howard, Entomologist. pp. 101, figs. 17. 1898. Price 10 cents. Postage 4 cents.

No. 19. Some insects injurious to garden and orchard crops. A series of articles dealing with insects of this class. By F. H. Chittenden. pp. 99, figs. 20. 1899. Out of print.

No. 20. Proceedings of the eleventh annual meeting of the Association of Economic Entomologists. pp. 111, figs. 4. 1899. Price 10 cents. Postage 4 cents.

No. 21. Preliminary report on the insect enemies of forests in the Northwest. An account of the results gained from a reconnaissance trip made in the spring and early summer of 1899. By A. D. Hopkins. pp. 27. 1899. Out of print.

No. 22. Some miscellaneous results of the work of the Division of Entomology. IV. Prepared under the direction of L. O. Howard, Entomologist. pp. 109, figs. 28. 1900. Price 10 cents. Postage 4 cents.

No. 23. Some insects injurious to garden crops. A series of articles dealing with insects of this class. By F. H. Chittenden. pp. 92, figs. 23. 1900. Out of print.

No. 24. [A list of works on North American entomology. Compiled . . . by Nathan Banks. pp. 95. 1900. Price 10 cents. Postage 4 cents.

No. 25. Notes on the mosquitoes of the United States: Giving some account of their structure and biology, with remarks on remedies. By L. O. Howard. pp. 70, figs. 22. 1900. Price 10 cents. Postage 3 cents.

No. 26. Proceedings of the twelfth annual meeting of the Association of Economic Entomologists. pp. 102, pls. 2. 1900. Price 10 cents. Postage 4 cents.

No. 27. Some insects injurious to the violet, rose, and other ornamental plants. A collection of articles dealing with insects of this class. By F. H. Chittenden. pp. 114, figs. 29, pls. 4. 1901. Out of print.

Same, revised edition. pp. 114, figs. 29, pls. 4. 1901. Price 10 cents. Postage 4 cents.

No. 28. Insect enemies of spruce in the Northeast. A popular account of results of special investigations, with recommendations for preventing losses. . . . By A. D. Hopkins. pp. 80, figs. 2, pls. 16. 1901. Price 10 cents. Postage 5 cents.

No. 29. The fall army worm [*Laphygma frugiperda* S. & A.] and variegated cutworm [*Peridroma margaritosa* Haw. (*saucia* Hübn.)]. By F. H. Chittenden. pp. 64, figs. 11. 1901. Price 5 cents. Postage 3 cents.

No. 30. Some miscellaneous results of the work of the Division of Entomology. V. Prepared under the direction of L. O. Howard, Entomologist. pp. 98, figs. 29, pls. 2. 1901. Price 10 cents. Postage 4 cents.

No. 31. Proceedings of the thirteenth annual meeting of the Association of Economic Entomologists [1901]. pp. 103, figs. 4, pls. 2. 1902. Price 10 cents. Postage 4 cents.

No. 32. Insect enemies of the pine in the Black Hills Forest Reserve. An account of results of special investigations, with recommendations for preventing losses. By A. D. Hopkins. pp. 24, figs. 5, pls. 7. 1902. Price 10 cents. Postage 2 cents.

No. 33. Some insects injurious to vegetable crops. A series of articles dealing with insects of this class. By F. H. Chittenden. pp. 117, figs. 30. 1902. Price 10 cents. Postage 4 cents.

No. 34. The principal insects liable to be distributed on nursery stock. By Nathan Banks. pp. 46, figs. 47. 1902. Price 5 cents Postage 2 cents.

No. 35. Report on codling-moth [*Carpocapsa pomonella* L.] investigations in the Northwest during 1901. By C. B. Simpson. pp. 29, fig. 1, pls. 5. 1902. Price 10 cents. Postage 2 cents.

No. 36. An index to Bulletins Nos. 1-30 (new series) (1896-1901) of the Division of Entomology. By Nathan Banks. pp. 64. 1902. Price 5 cents. Postage 3 cents.

No. 37. Proceedings of the fourteenth annual meeting of the Association of Economic Entomologists. pp. 127, figs. 2, pl. 1. 1902. Price 10 cents. Postage 5 cents.

No. 38. Some miscellaneous results of the work of the Division of Entomology. VI. Prepared under the direction of the Entomologist. pp. 110, figs. 9, pls. 2. 1902. Price 10 cents. Postage 4 cents.

No. 39. The culture of the mulberry silkworm [*Bombyx mori* L.]. By Henrietta Aiken Kelly. pp. 32, figs. 15. 1903. Out of print.

No. 40. Proceedings of the fifteenth annual meeting of the Association of Economic Entomologists. pp. 124, figs. 6, pls. 2. 1903. Price 10 cents. Postage 5 cents.

No. 41. The codling moth [*Carpocapsa pomonella* L.]. By C. B. Simpson. pp. 105, figs. 19, pls. 16. 1903. Price 15 cents. Postage 5 cents.

No. 42. Some insects attacking the stems of growing wheat, rye, barley, and oats, with methods of prevention and suppression. By F. M. Webster. pp. 62, figs. 15. 1903. Price 5 cents. Postage 3 cents.

No. 43. A brief account of the principal insect enemies of the sugar beet. By F. H. Chittenden. pp. 71, figs. 65. 1903. Price 5 cents. Postage 3 cents.

No. 44. Some miscellaneous results of the work of the Division of Entomology. VII. Prepared under the direction of the Entomologist. pp. 99, figs. 19, pl. 1. 1904. Price 10 cents. Postage 4 cents.

No. 45. The Mexican cotton boll weevil [*Anthonomus grandis* Boh.]. By W. D. Hunter and W. E. Hinds. pp. 116, figs. 6, pls. 16. 1904. Price 25 cents. Postage 6 cents.

No. 46. Proceedings of the sixteenth annual meeting of the Association of Economic Entomologists. pp. 113, fig. 1, pls. 2. 1904. Price 10 cents. Postage 4 cents.

No. 47. Catalogue of the exhibit of economic entomology at the Louisiana Purchase Exposition, St. Louis, Mo., 1904 . . . By E. S. G. Titus and F. C. Pratt. pp. 155. 1904. Out of print.

Same, revised edition. 1904. Price 10 cents. Postage 5 cents.

No. 48. Catalogue of exhibits of insect enemies of forests and forest products at the Louisiana Purchase Exposition, St. Louis, Mo., 1904. By A. D. Hopkins. pp. 56, pls. 22. 1904. Price 15 cents. Postage 4 cents.

No. 49. Report on the habits of the kelep, or Gautemalan cotton-boll-weevil ant. By O. F. Cook. pp. 15. 1904. Price 5 cents. Postage 1 cent.

No. 50. The cotton bollworm [*Heliothis obsoleta* Fab.]. By A. L. Quaintance and C. T. Brues. pp. 155, figs. 27, pls. 25, map 1. 1905. Price 25 cents. Postage 8 cents.

No. 51. The Mexican cotton boll weevil [*Anthonomus grandis* Boh.]. A revision and amplification of Bulletin 45, to include the most important observations made in 1904. By W. D. Hunter and W. E. Hinds. pp. 181, figs. 8, pls. 23. 1905. Price 15 cents. Postage 8 cents.

Same, 58th Cong., 3d sess., H. Doc. 383.

No. 52. Proceedings of the seventeenth annual meeting of the Association of Economic Entomologists. pp. 123, figs. 7. 1905. Price 10 cents. Postage 4 cents.

No. 53. Catalogue of the exhibit of economic entomology at the Lewis and Clark Centennial Exposition, Portland, Oregon, 1905 . . . By Rolla P. Currie. pp. 127. 1905. Price 10 cents. Postage 5 cents.

No. 54. Some miscellaneous results of the work of the Bureau of Entomology. VIII. Prepared under the direction of the Entomologist. pp. 99, figs. 20, pls. 4. 1905. Price 10 cents. Postage 4 cents.

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No. 58, Part I. Some insects injurious to forests. The locust borer [*Cyllene robiniae* Forst.]. By A. D. Hopkins. pp. iv+16, figs. 6, pl. I. June 13, 1906. Price 5 cents. Postage 1 cent.

No. 58, Part II. Some insects injurious to forests. The western pine-destroying bark-beetle [*Dendroctonus brevicomis* Lec.]. By J. L. Webb, pp. vi+17-30, figs. 7-12, pls. II-III. August 18, 1906. Price 10 cents. Postage 2 cents.

No. 58, Part III. Some insects injurious to forests. Additional data on the locust borer [*Cyllene robiniae* Forst.]. By A. D. Hopkins, pp. iv+31-40. Issued March 5, 1907. Price 5 cents. Postage 1 cent.

No. 59. Proliferation as a factor in the natural control of the Mexican cotton boll weevil. By W. E. Hinds. pp. 45, pls. 6. August 27, 1906. Price 15 cents. Postage 3 cents.

No. 60. Proceedings of the eighteenth annual meeting of the Association of Economic Entomologists. pp. 206, figs. 10, pls. 3. Issued September 22, 1906. Price 20 cents. Postage 7 cents.

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No. 62. The San Jose or Chinese scale [*Aspidiotus perniciosus* Comst.]. By C. L. Marlatt. pp. 89, figs. 12, pls. 9. Issued December 5, 1906. Price 25 cents. Postage 4 cents.

No. 63, Part I. Papers on the cotton boll weevil and related and associated insects. Hibernation and development of the cotton boll weevil [*Anthonomus grandis* Boh.]. By E. Dwight Sanderson. pp. iv+38, figs. 6. Issued January 15, 1907. Price 5 cents. Postage 2 cents.

No. 63, Part II. Papers on the cotton boll weevil and related and associated insects. Notes on the biology of certain weevils related to the cotton boll weevil. By W. Dwight Pierce. pp. ii+39-44, pl. I. Issued February 5, 1907. Price 5 cents. Postage 1 cent.

No. 63, Part III. Papers on the cotton boll weevil and related and associated insects. An ant enemy [*Solenopsis geminata* Fab., var. *xyloni* McC.]. of the cotton boll weevil. By W. E. Hinds. pp. iv+45-48, fig. 7. Issued February 5, 1907. Price 5 cents. Postage 1 cent.

No. 63, Part IV. Papers on the cotton boll weevil and related and associated insects. A predatory bug [*Apiomerus spissipes* Say] reported as an enemy of the cotton boll weevil. By A. C. Morgan. pp. iv+49-54, figs. 8-9. Issued February 8, 1907. Price 5 cents. Postage 1 cent.

No. 63, Part V. Papers on the cotton boll weevil and related and associated insects. Notes on the pepper weevil [*Anthonomus eugenii* Cano (*ancotinctus* Champ.)]. By F. C. Pratt. pp. iv+55-58, fig. 10, pl. II. Issued February 9, 1907. Price 5 cents. Postage 1 cent.

No. 63, Part VI. Papers on the cotton boll weevil and related and associated insects. The strawberry weevil in the south-central States in 1905 [*Anthonomus signatus* Say]. By A. W. Morrill. pp. iv+59-62. Issued January 22, 1907. Price 5 cents. Postage 1 cent.

No. 63, Part VII. Papers on the cotton boll weevil and related and associated insects. The cotton stalk-borer [*Ataxia crypta* Say]. By A. C. Morgan. pp. iv+63-66, pl. III. Issued February 9, 1907. Price 5 cents. Postage 1 cent.

No. 64, Part I. Some miscellaneous results of the work of the Bureau of Entomology. IX. The Mexican conchuela in western Texas in 1905 [*Pentatomia ligata* Say]. By A. W. Morrill. pp. ii+14, figs. 2, pl. I. Issued April 2, 1907. Price 5 cents. Postage 1 cent.

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 IX. Insects injurious to the loco weeds. By F. H. Chittenden. pp. ii+33-42, figs. 8-14. Issued May 29, 1908. Price 5 cents. Postage 1 cent.

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No. 66, Part II. Some insects injurious to truck crops. The water-cress sowbug [*Manocassellus brachyurus* Harger]. The water-cress leaf-beetle [*Phædon xeruginosa* Suffr.]. By F. H. Chittenden. pp. iv+11-20, figs. 3-5. Issued April 23, 1907. Price 5 cents. Postage 1 cent.

No. 66, Part III. Some insects injurious to truck crops. The cranberry spanworm [*Cleora pampinaria* Guen.]. The striped garden caterpillar [*Mamestra legitima* Grote]. By F. H. Chittenden. pp. iv+21-32, figs. 6-7. Issued August 31, 1907. Price 5 cents. Postage 1 cent.

No. 66, Part IV. Some insects injurious to truck crops. The leafhoppers of the sugar beet and their relation to the "curly-leaf" condition. By E. D. Ball. pp. iv+33-52, pls. I-IV. Issued January 27, 1909. Price 10 cents. Postage 2 cents.

No. 66, Part V. Some insects injurious to truck crops. The semitropical army worm [*Prodenia eridania* Cram.]. By F. H. Chittenden and H. M. Russell. pp. ii+53-70, figs. 8-11. Issued January 28, 1909. Price 5 cents. Postage 1 cent.

No. 67. Proceedings of the nineteenth annual meeting of the Association of Economic Entomologists. pp. 145, figs. 7, pl. 1. Issued November 25, 1907. Price 20 cents. Postage 5 cents.

No. 68, Part I. Papers on deciduous fruit insects and insecticides. The pear thrips [*Euthrips pyri* Daniel]. By Dudley Moulton. pp. iv+16, figs. 8, pls. I-II. Issued June 10, 1907. Price 10 cents. Postage 2 cents.

No. 68, Part II. Papers on deciduous fruit insects and insecticides. The spring canker-worm [*Paleacrita vernata* Peck]. By A. L. Quaintance. pp. ii+17-22, pls. III-IV. Issued July 6, 1907. Price 5 cents. Postage 1 cent.

No. 68, Part III. Papers on deciduous fruit insects and insecticides. The trumpet leaf-miner of the apple [*Tischeria malifoliella* Clemens]. By A. L. Quaintance. pp. iv+23-30, fig. 9, pl. V. Issued October 15, 1907. Price 5 cents. Postage 1 cent.

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No. 68, Part VIII. Papers on deciduous fruit insects and insecticides. The grape-lea skeletonizer [*Harrisina americana* Guér.]. By P. R. Jones. pp. ii+77-90, figs. 12-17. Issued January 20, 1909. Price 5 cents. Postage 1 cent.

No. 68, Part IX. Papers on deciduous fruit insects and insecticides. The peach-tree barkbeetle [*Phlaeotribus liminaris* Harr.]. By H. F. Wilson. pp. iv+91-108, figs. 18-20, pls. X-XI. Issued February 11, 1909. Price 5 cents. Postage 2 cents.

No. 69. The chinch bug [*Blissus leucopterus* Say]. By F. M. Webster. pp. 95, figs. 19. Issued June 21, 1907. Price 15 cents. Postage 4 cents.

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No. 71. The periodical cicada [*Tibicen septendecim* L.]. By C. L. Marlatt. pp. 181, front., figs. 68, pls. 6. Issued July 18, 1907. Price 40 cents. Postage 9 cents.

No. 72. Information concerning the North American fever tick [*Margaropus (Boophilus) annulatus* Say], with notes on other species. By W. D. Hunter and W. A. Hooker. pp. 87, figs. 13, pls. 4. Issued November 2, 1907. Price 15 cents. Postage 4 cents.

No. 73. Studies of parasites of the cotton boll weevil [*Anthonomus grandis* Boh.]. By W. Dwight Pierce. pp. 63, figs. 6, pls. 3. Issued January 21, 1908. Price 10 cents. Postage 3 cents.

No. 74. Some factors in the natural control of the Mexican cotton boll weevil [*Anthonomus grandis* Boh.]. By W. E. Hinds. pp. 79, figs. 2, pls. 4. Issued December 14, 1907. Price 15 cents. Postage 4 cents.

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 No. 10. The Harlequin cabbage bug, or calico back (*Murgantia histrionica* Hahn). By L. O. Howard. pp. 2, fig. 1. May 24, 1895. Out of print. (Superseded by No. 103.)
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 No. 14. (Revision of No. 6.) The Mexican cotton-boll weevil (*Anthonomus grandis* Boh.). By L. O. Howard. pp. 8, figs. 5. February 12, 1896. Out of print.
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No. 16. The larger corn stalk-borer (*Diatræa saccharalis* Fab.). By L. O. Howard. pp. 3, figs. 3. August 13, 1896.

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No. 32. ~~The larger apple-tree borers.~~ By F. H. Chittenden. pp. 12, figs. 3. July 1, 1898. Out of print.

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Same, third revise. pp. 11, figs. 3. Issued December 10, 1907.

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No. 38. The squash-vine borer (*Melittia satyriniformis* Hbn.). By F. H. Chittenden. pp. 6, figs. 2. April 22, 1899. Out of print.

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No. 43. The destructive green pea louse (*Nectarophora destructor* Johns.). By F. H. Chittenden. pp. 8, figs. 3. May 23, 1901. Out of print.

Same, second edition [entitled "The pea aphis (*Macrosiphum pisi* Kalt.)"]. pp. 10, figs. 7. Issued February 25, 1909.

No. 44. The periodical cicada in 1902. By W. D. Hunter. pp. 4, figs. 2. March 13, 1902. Out of print.

No. 45. A new nomenclature for the broods of the periodical cicada. By C. L. Marlatt. pp. 8. May 1, 1902. Out of print.

No. 46. Hydrocyanic-acid gas against household insects. By L. O. Howard. pp. 6. June 22, 1902. Out of print.

Same, revised edition. pp. 7. Issued February 20, 1907. Revised by C. L. Marlatt, Entomologist and acting chief in absence of chief.

No. 47. The bedbug (*Cimex lectularius* Linn.). By C. L. Marlatt. pp. 8, figs. 3. June 15, 1902. Out of print.

Same, revised edition. pp. 8, figs. 3. Issued February 26, 1907.

No. 48. The house centipede (*Scutigera forceps* Raf.). By C. L. Marlatt. pp. 4, figs. 2. June 10, 1902.

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Same, revised edition. pp. 6, fig. 1. Issued July 28, 1908.

No. 63. Root-maggots and how to control them. By F. H. Chittenden. pp. 7, figs. 5. June 6, 1905. Out of print.
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No. 64. The cottony maple scale (*Pulvinaria innumerabilis* Rathv.). By J. G. Sanders. pp. 6, figs. 4. September 7, 1905.

No. 65. The cotton red spider (*Tetranychus gloveri* Bks.). By E. S. G. Titus. pp. 5, figs. 2. October 30, 1905.

No. 66. The joint-worm (*Isosoma tritici* Fitch). By F. M. Webster. pp. 5, figs. 5. October 20, 1905. Out of print.
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No. 68. The tobacco thrips and remedies to prevent "white veins" in wrapper tobacco (*Euthrips nicotianæ* Hinds). By W. A. Hooker. pp. 5, figs. 2. February 26, 1906.

No. 69. Some insects affecting the production of red clover seed. By F. M. Webster. pp. 9, figs. 8. April 12, 1906.

No. 70. The Hessian fly (*Mayetiola [Cecidomyia] destructor* Say). By F. M. Webster. pp. 16, figs. 16. April 14, 1906.

No. 71. (Revision of Circular No. 35.) House flies (*Musca domestica* et al.). By L. O. Howard. pp. 9, figs. 9. March 27, 1906. Out of print.
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No. 72. Key to the known larvae of the mosquitoes of the United States. By Harrison G. Dyar. pp. 6, fig. 1. April 27, 1906.

No. 73. The plum curculio (*Conotrachelus nenuphar* Herbst). By Fred Johnson and A. A. Girault. pp. 10, figs. 5. April 14, 1906.

No. 74. The periodical cicada in 1906. By C. L. Marlatt. pp. 5, figs. 3. April 16, 1906.

No. 75. Requirements to be complied with by nurserymen or others who make interstate shipments of nursery stock. By A. F. Burgess. pp. 6. July 5, 1906. Out of print.

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No. 76. List of publications of the Bureau of Entomology. Compiled by Mabel Colcord. pp. 21. September 24, 1906. Out of print.

Same, revised to March 1, 1908. pp. 28. Out of print.

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No. 77. Harvest mites, or "chiggers." By F. H. Chittenden. pp. 6, figs. 3. September 29, 1906.

No. 78. The slender seed-corn ground-beetle (*Clivina impressifrons* Lec.). By F. M. Webster. pp. 5, figs. 2. October 4, 1906.

No. 79. The brood diseases of bees. By E. F. Phillips. pp. 5. October 3, 1906.

No. 80. The melon aphis (*Aphis gossypii* Glov.). By F. H. Chittenden. pp. 16, figs. 6. November 14, 1906.

No. 81. The aphides affecting the apple. By A. L. Quaintance. pp. 10, figs. 8. Issued March 9, 1907.

No. 82. Pinhole injury to girdled cypress in the South Atlantic and Gulf States. By A. D. Hopkins. pp. 4, fig. 1. Issued January 2, 1907.

No. 83. The locust borer [*Cyllene robiniae* Forst.] and methods for its control. By A. D. Hopkins. pp. 8, figs. 4. Issued February 19, 1907.

No. 84. The grasshopper problem and alfalfa culture. By F. M. Webster. pp. 10, figs. 8. Issued April 6, 1907.

No. 85. The spring grain-aphis (*Toxoptera graminum* Rond.). By F. M. Webster. pp. 7, figs. 3. Issued March 29, 1907. (See also No. 93.)

No. 86. The corn leaf-aphis [*Aphis maidis* Fitch] and corn root-aphis [*Aphis maidis-radicis* Forbes]. By F. M. Webster. pp. 13, figs. 4. Issued May 6, 1907.

No. 87. The Colorado potato beetle (*Leptinotarsa decemlineata* Say). By F. H. Chittenden. pp. 15, figs. 6. Issued June 3, 1907.

No. 88. The terrapin scale (*Eulecanium nigrofasciatum* Pergande.). By J. G. Sanders. pp. 4, figs. 3. Issued May 14, 1907.

No. 89. The periodical cicada in 1907 (*Tibicen septendecim* L., race *tredecim* Walsh-Riley). By C. L. Marlatt. pp. 4, figs. 3. Issued May 14, 1907.

No. 90. The white-pine weevil [*Pissodes strobi* Peck]. By A. D. Hopkins. pp. 8, figs. 6. Issued June 18, 1907.

No. 91. Note on the occurrence of the North American fever tick [*Margaropus (Boophilus) annulatus* Say] on sheep. By W. D. Hunter. pp. 3. Issued July 3, 1907.

No. 92. Mites and lice on poultry. By Nathan Banks. pp. 88, figs. 6. Issued September 25, 1907.

No. 93. The spring grain-aphis or so-called "green bug" (*Toxoptera graminum* Rond.). By F. M. Webster. pp. 18, figs. 7. Issued August 22, 1907.

No. 94. The cause of American foul brood [*Bacillus larvæ*]. By G. F. White. pp. 4. Issued July 29, 1907.

No. 95. (Revision of Circular No. 56.) The most important step in the control of the bollweevil [*Anthonomus grandis* Boh.]. By W. D. Hunter. pp. 8. Issued October 3, 1907. Out of print.

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No. 96. The catalpa sphinx (*Ceratomia catalpæ* Bdv.). By L. O. Howard and F. H. Chittenden. pp. 7, figs. 2. Issued December 16, 1907.

No. 97. The bagworm (*Thyridopteryx ephemeraeformis* Haw.). By L. O. Howard and F. H. Chittenden. pp. 10, figs. 11. Issued February 6, 1908.

No. 98. The apple-tree tent caterpillar (*Malacosoma americana* Fab.). By A. L. Quaintance. pp. 8, figs. 4. Issued January 28, 1908.

No. 99. The nut weevils.^a By F. H. Chittenden. pp. 15, figs. 14. Issued March 6, 1908.

No. 100. (In preparation.)

No. 101. The apple maggot or "railroad worm" (*Rhagoletis* [*Trypeta*] *pomonella* Walsh). By A. L. Quaintance. pp. 12, figs. 2. Issued May 4, 1908.

No. 102. The asparagus beetles. By F. H. Chittenden. pp. 12, figs. 7. Issued May 20, 1908.

No. 103. The harlequin cabbage bug (*Murgantia histrionica* Hahn). By F. H. Chittenden. pp. 10, fig. 1. Issued June 20, 1908.

No. 104. The common red spider (*Tetranychus bimaculatus* Harvey). By F. H. Chittenden. pp. 11, figs. 4. Issued January 26, 1909.

No. 105. The rose slugs. By F. H. Chittenden. pp. 12, figs. 5. Issued October 5, 1908.

No. 106. (In preparation.)

No. 107. What can be done in destroying the cotton boll weevil during the winter. By W. D. Hunter. pp. 4. Issued January 12, 1909.

No. 108. House fleas. By L. O. Howard. pp. 4, figs. 2. Issued February 11, 1909.

TECHNICAL SERIES.

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No. 2. The grass and grain joint-worm flies and their allies: A consideration of some North American phytophagous Eurytominæ. By L. O. Howard. pp. 24, figs. 10. 1896. Out of print.

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No. 5. A study in insect parasitism: A consideration of the parasites of the white-marked tussock moth [*Hemerocampa (Orgyia) leucostigma* S. & A.], with an account of their habits and interrelations, and with descriptions of new species. By L. O. Howard. pp. 57, figs. 24. 1897. Out of print.

No. 6. The San Jose scale [*Aspidiota perniciosus* Comst.] and its nearest allies. A brief consideration of the characters which distinguish these closely related scale insects. By T. D. A. Cockerell. pp. 31, figs. 15. 1897. Out of print.

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No. 8. Contributions to a monograph of the American Aleurodidae. By A. L. Quaintance. The red spiders of the United States (*Tetranychus* and *Stigmæus*). By Nathan Banks. pp. 79, figs. 16, pls. 8. 1900. Price 10 cents. Postage 4 cents.

^a Reprinted from Yearbook of the Department of Agriculture for 1904. pp. 299-310, pls. XXVIII-XXX, figs. 17-26.

No. 9. The life history of two species of plant-lice [*Hormaphis hamamelidis* Fitch and *Hamamelistes spinosus* Shimer] inhabiting both the witch-hazel and birch. By Theo. Pergande. pp. 44, figs. 23. 1901. Price 5 cents. Postage 2 cents.

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No. 11. A classification of the mosquitoes of North and Middle America. By D. W. Coquillett. pp. 31, fig. 1. 1906. Price 5 cents. Postage 2 cents.

No. 12, Part I. Miscellaneous papers. Catalogue of recently described Coccidae. By J. G. Sanders. pp. 18. June 5, 1906. Price 10 cents. Postage 2 cents.

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SPECIAL REPORTS.

Bibliography of the more important contributions to American economic entomology. Prepared by Samuel Henshaw. Part I. The more important writings of Benjamin Dann Walsh. pp. 49. 1889. Out of print.

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 nomic entomology. L-Z. pp. 179. 1896. Out of print.

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 Part VII. The more important writings published between December 31, 1896,
 and January 1, 1900. Prepared under the direction of the Entomologist, by Nathan
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Bibliography of the more important contributions to American economic entomology.
 Part VIII. The more important writings published between December 31, 1899,
 and January 1, 1905. Prepared under the direction of the Entomologist, by Nathan
 Banks, Assistant Entomologist. pp. 132. 1905. Price 5 cents. Postage 3 cents.

UNITED STATES ENTOMOLOGICAL COMMISSION.

[Members of the Commission: C. V. Riley, A. S. Packard, and Cyrus Thomas. The Commission was attached to the United States Geological and Geographical Survey of the Territories, Department of the Interior, until March 3, 1881. The third report of the Commission inaugurated its transfer to the Department of Agriculture. Of the Bulletins, Nos. 1 and 2 were made under direction of the United States Geological and Geographical Survey of the Territories (Hayden); Nos. 3-7 under direction of the Interior Department; none was issued under the Agricultural Department.]

BULLETINS.

No. 1. Destruction of the young or unfledged locusts [*Melanoplus (Caloptenus) spretus* Uhl.]. pp. 12. 1877. Out of print.

No. 2. On the natural history of the Rocky Mountain locust [*Melanoplus (Caloptenus) spretus* Uhl.], and on the habits of the young or unfledged insects as they occur in the more fertile country in which they will hatch the present year. pp. 14, figs. 10, map 1. 1877. Out of print.

No. 3. The cotton worm [*Alabama (Aletia) argillacea* Hübn.]. Summary of its natural history, with an account of its enemies, and the best means of controlling it; being a report of progress of the work of the Commission. By C. V. Riley. pp. 144, figs. 84, pl. 1. 1880. Out of print.

No. 4. The Hessian fly [*Mayetiola (Cecidomyia) destructor* Say]. Its ravages, habits, enemies, and means of preventing its increase. By A. S. Packard. pp. 43, fig. 1, pls. 2, map 1. 1880. Out of print.

No. 5. The chinch-bug [*Blissus leucopterus* Say]. Its history, characters, and habits, and the means of destroying it or counteracting its injuries. By Cyrus Thomas. pp. 44, figs. 10, map 1. 1879. Out of print.

No. 6. General index and supplement to the nine reports on the insects of Missouri. By Charles V. Riley. pp. 177. 1881. Out of print.

No. 7. Insects injurious to forest and shade trees. By A. S. Packard. pp. 275, figs. 100. 1881. Out of print.

REPORTS.

First annual report, for the year 1877, relating to the Rocky Mountain locust [*Melanoplus (Caloptenus) spretus* Uhl.] and the best methods of preventing its injuries and of guarding against its invasions, in pursuance of an appropriation made by Congress for this purpose. With maps and illustrations. pp. xvi+477+294, figs. 111, pls. 5, maps 2. 1878. Out of print.

Second report, for the years 1878 and 1879, relating to the Rocky Mountain locust [*Melanoplus (Caloptenus) spretus* Uhl.] and the western cricket [*Anabrus simplex* Hald.], and treating of the best means of subduing the locust in its permanent breeding grounds, with a view of preventing its migrations into the more fertile portions of the trans-Mississippi country, in pursuance of appropriations made by Congress for this purpose. With maps and illustrations. pp. xviii+322+80, figs. 10, pls. 17, maps 7. 1880. Out of print.

Third report, relating to the Rocky Mountain locust, the western cricket, the army worm, canker worms, and the Hessian fly, together with descriptions of larvæ of injurious forest insects, studies of embryological development of the locust and of other insects, and on the systematic position of the Orthoptera in relation to other orders of insects. With maps and illustrations. pp. xiv+347+12+92, figs. 14, pls. 64, maps 3. 1883. Price, cloth, \$1. Postage 20 cents.

Same, 47th Cong., 2d sess., H. Mis. Doc. 44, serial No. 2154.

Fourth report, being a revised edition of Bulletin No. 3, and the final report on the cotton worm [*Alabama (Aletia) argillacea*], together with a chapter on the boll worm [*Heliothis obsoleta* Fab. (*H. armigera* Hübn.)]. By Charles V. Riley. With maps and illustrations. pp. xxxviii+399+147, figs. 45, pls. 64, maps 2. 1883.

Same, 48th Cong., 2d sess., H. Mis. Doc. 39, serial No. 2325. Price \$1.25. Postage 22 cents.

Fifth report, being a revised and enlarged edition of Bulletin No. 7, on Insects injurious to forest and shade trees. By Alpheus S. Packard. pp. viii+957, figs. 306, pls. 40. 1890. Out of print.

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INSECT LIFE.

Vol. I, Nos. 1-12, July, 1888, to June, 1889. Devoted to the economy and life habits of insects, especially in their relations to agriculture, and edited by the Entomologist and his assistants. pp. xxxii+388, figs. 76. 1888-1889. Out of print.

Vol. II, Nos. 1-12. July, 1889, to June, 1890. Devoted to the economy and life habits of insects, especially in their relations to agriculture. Edited by C. V. Riley, Entomologist, and L. O. Howard, first assistant, with the assistance of other members of the divisional force. pp. viii+418, figs. 71. 1889-1890. Out of print.

Vol. III, Nos. 1-12. August, 1890, to August, 1891. Devoted to the economy and life habits of insects, especially in their relations to agriculture. Edited by C. V. Riley, Entomologist, and L. O. Howard, first assistant, with the assistance of other members of the divisional force. pp. viii+519, figs. 36, pl. 1. 1891. Out of print.

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Vol. V, Nos. 1-5. September, 1892, to July, 1893. Devoted to the economy and life habits of insects, especially in their relations to agriculture. Edited by C. V. Riley, Entomologist, and L. O. Howard, first assistant, with the assistance of other members of the divisional force. pp. vii+402, figs. 47, pls. 3. 1893. Out of print.

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No. 7. Spraying fruits for insect pests and fungous diseases, with a special consideration of the subject in its relation to public health. pp. 20. 1892. Out of print.

No. 19. Important insecticides: Directions for their preparation and use. By C. L. Marlatt. pp. 20. 1894. Out of print.

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No. 211. The use of Paris green in controlling the cotton boll weevil. By W. D. Hunter. pp. 23. 1904.

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No. 275. The gipsy moth [*Porthetria dispar* L.] and how to control it. By L. O. Howard. pp. 22+ii, figs. 7. Issued January 18, 1907.

No. 283. Spraying for apple diseases and the codling moth [*Carpocapsa pomonella* L.] in the Ozarks. By W. M. Scott and A. L. Quaintance. pp. 42+ii, figs. 7. Issued April 29, 1907.

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No. 290. The cotton bollworm [*Heliothis obsoleta* Fab.]: A summary of its life history and habits, with some results of investigations in 1905 and 1906. By F. C. Bishop and C. R. Jones. pp. 32, figs. 4. Issued May 10, 1907.

No. 344. The boll weevil problem, with special reference to means of reducing damage. By W. D. Hunter. pp. 46, figs. 8. Issued January 23, 1909.

REPRINTS FROM YEARBOOKS.

1894.

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Approved:

JAMES WILSON,

Secretary of Agriculture.

WASHINGTON, D. C., *May 8, 1909.*

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